# **Justin Tsai**

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## WORK EXPERIENCE

CPP Virtual Reality Lab Pomona, CA

Administrator Aug 2018 - May 2019

- Led and managed groups of students to develop VR/AR projects for presentation to industry sponsors.
- Mentored students and hosted workshops and code reviews to teach basic Unity development.
- Familiar working with the HTC Vive Pro, Oculus Rift, and Microsoft HoloLens.
- Updated the organization's web page with improved readability and responsiveness.

# SKILLS

# California Polytechnic University, Pomona

Pomona, CA

Bachelor of Science, Computer Science

May 2019

GPA: 3.5, Dean's List

#### **PROJECTS**

#### **VR Combination and Permutation**

C#, Unity

- Collaborated in a team of three to develop a VR research project that tests the player's understanding of math concepts in an escape-room environment.
- Implemented scripts for player movement, controls, audio, and environment interactions.

**Isolation** Java

- Created a player vs computer console game coded in Java. The player has to outmaneuver the computer by trapping it with previously made moves.
- Implemented a min-max algorithm utilizing alpha-beta pruning with iterative deepening that the computer uses as a heuristic to make its moves.

VR Wildfire C#, Unity

- Enhanced and debugged an existing VR research project that simulates a scenario in which the user is caught in the middle of a wildfire to see what courses of action the user takes.
- Fixed errors by analyzing and rewriting existing code from scripts.

Spellbreaker C#, Unity

 Creating a single player VR hack and slash game. The player will have to cut through a flurry of magic projectiles aimed at them using their swords.

## SKILLS

- Languages: Java (proficient), C# (proficient), HTML (proficient), CSS (proficient), Javascript (familiar) Python (familiar), C++ (familiar), MySQL (familiar)
- Tools: Unity, Visual Studio, Eclipse, NetBeans, GitHub Desktop, PuTTy, Android Studio, Microsoft Office